

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

ARTHROCARE CORPORATION,

Plaintiff,

v.

SMITH & NEPHEW, INC.,

Defendant.

C.A. No. 01-504 SLR

**DEFENDANT SMITH & NEPHEW, INC.'S SUPPLEMENTAL RESPONSES TO  
PLAINTIFF ARTHROCARE CORPORATION'S INTERROGATORIES NOS. 4 AND 5**

Smith & Nephew, Inc. ("Smith & Nephew") supplements its answers and objections to ArthroCare Corporation's ("ArthroCare") First Set of Interrogatories [Nos. 1-7] as follows:

**GENERAL OBJECTIONS**

1. Smith & Nephew objects to the definitions and instructions and to each interrogatory to the extent they are inconsistent with and more burdensome than the Federal Rules of Civil Procedure, the Delaware Local Rules and the orders of this Court. For example, Smith & Nephew objects to Instruction No. 11 as inconsistent with and more burdensome than the applicable rules and orders governing claims of privilege and work product for interrogatory responses. Smith & Nephew will comply with the Federal Rules of Civil Procedure, the Delaware Local Rules and the orders of this Court.

2. Smith & Nephew objects to each interrogatory to the extent it seeks disclosure of information protected by the attorney-client privilege, work product doctrine, or other applicable privilege or immunity. Any disclosure Smith & Nephew makes of such information is

inadvertent and does not constitute a waiver of the applicable privilege or immunity as to such information.

3. Smith & Nephew objects to each interrogatory to the extent it seeks disclosure of confidential information, until such time that a suitable protective order is entered in this case. It is expected that the parties will be able to agree to the terms of such a protective order without assistance from the Court, which will, *inter alia*, specify how confidential information is to be designated. Smith & Nephew is in the process of drafting a suitable protective order, which will be provided shortly. Smith & Nephew also objects to disclosing information that Smith & Nephew is obligated to third parties to maintain as confidential. Smith & Nephew will seek the permission of such third parties to disclose such information, once a suitable protective order is entered.

4. Smith & Nephew objects that the definition of "ArthroCare" is vague. Smith & Nephew will respond on the basis that the term "ArthroCare" is understood to refer to the plaintiff in this action, ArthroCare Corp., and its employees and agents.

5. Smith & Nephew objects that the definition of "Defendant," "Smith & Nephew," "You," and "Your" is vague and overbroad, and seeks irrelevant information not related to any claim or defense in this action. The only Smith & Nephew business unit that is involved in making and selling the accused product is the Endoscopy Division of Smith & Nephew. Accordingly, Smith & Nephew will respond on the basis that the terms "Defendant," "Smith & Nephew," "You," and "Your" are understood to mean Smith & Nephew's Endoscopy Division.

6. Smith & Nephew objects that the definition of "Relates To," "Relating To," "In Relation To," and "Related To" is overbroad, unduly burdensome, and seeks irrelevant information not related to any claim or defense in this action. Smith & Nephew will interpret these terms as meaning "constituting, containing, referring to, describing, analyzing, and discussing" and their cognates to "Relates To" and "Related To."

7. Smith & Nephew objects that the definition of "identify" is overbroad and unduly burdensome. Rather than provide the information requested, where an interrogatory asks that Smith & Nephew "identify" an individual, Smith & Nephew may instead provide sufficient information from which ArthroCare can contact the individual; where an interrogatory asks that Smith & Nephew "identify" a document, Smith & Nephew may instead produce the document and/or provide the production number range for the document.

8. Smith & Nephew objects that the definition of "Accused Device" is overbroad and unduly burdensome and seeks irrelevant information not related to any claim or defense in this action. The only products falling within ArthroCare's definition of "Accused Device" which have been introduced to the marketplace are the Dyonics Control RF Adaptor and the Dyonics Series 7000 RF RS Probe. Accordingly, Smith & Nephew will respond on the basis that the term "Accused Device" is understood to mean only the Dyonics Control RF Adaptor and the Dyonics Series 7000 RF RS Probe.

9. In accordance with Local Rule 26.1(b), Smith & Nephew shall count each subpart as a separate interrogatory. Smith & Nephew notes that ArthroCare's First Set of Interrogatories has numerous subparts, each of which comprises a separate interrogatory under the Federal Rules of Civil Procedure. Smith & Nephew objects to ArthroCare serving more than 35 interrogatories, thereby violating the agreed upon Scheduling Order. In order to expedite discovery, Smith & Nephew has not undertaken the task of enumerating each separate subpart contained within ArthroCare's interrogatories. If ArthroCare propounds additional interrogatories, however, Smith & Nephew will undertake such a task to ensure that ArthroCare does not exceed the numerical limit imposed by the Scheduling Order.

10. Discovery and analysis are ongoing in this case. Smith & Nephew reserves the right to supplement its responses as such discovery and analysis make necessary.

**INTERROGATORY NO. 4**

State in detail all facts upon which Defendant bases its denial of infringement of any of the Patents-In-Suit, including without limitation the Identity of the individuals with knowledge of any such facts and the Identity of all Documents and things Relating To any such facts.

**RESPONSE TO INTERROGATORY NO. 4**

In addition to the General Objections, Smith & Nephew also objects to this interrogatory to the extent it seeks information protected by attorney-client privilege and/or work product immunity. Smith & Nephew further objects to this interrogatory as overly broad and premature contention discovery: discovery in the case has just begun, there are more than 160 claims in the patents-in-suit, and only recently, i.e., on November 2, 2001, did ArthroCare disclose the identity of certain independent claims it is asserting, and even then, ArthroCare's claim designation was indicated to be tentative. ArthroCare still has not disclosed the identity of the dependent claims it is asserting despite having been asked to do so several times by Smith & Nephew. Accordingly, Smith & Nephew objects to ArthroCare's attempts to take contention discovery in such a piecemeal fashion.

Further answering, Smith & Nephew notes that in its interrogatories served on October 10, 2001, and in particular in Interrogatory Nos. 1-3, Smith & Nephew asked ArthroCare to identify the asserted claims and to provide its contentions as to claim construction. ArthroCare has requested an extension until December 10, 2001 to respond to these interrogatories. Accordingly, Smith & Nephew reserves its right to supplement its response to this interrogatory once ArthroCare answers Smith & Nephew's interrogatories, and as discovery proceeds.

**SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 4**

In addition to the information provided in response to this interrogatory and subject to and without waiving the general and specific objections therein, and based on the information currently available to it, Smith & Nephew supplements its response as follows: Smith & Nephew further objects to this interrogatory as being premature in light of the current status of this case, as discovery has just begun, ArthroCare has produced almost no confidential documents to Smith & Nephew, expert discovery in this case has not begun, and initial expert reports are not due until September 13, 2002.

Smith & Nephew also objects to this interrogatory on the grounds that ArthroCare has improperly refused to respond to Smith & Nephew's interrogatory requesting that ArthroCare identify how the asserted claims of the patents-in-suit should be construed on the grounds that any interrogatory requesting such information is purportedly superseded by the Court's scheduling order in this case. Arthrocare is wrong. The court's decision to set a date for exchange of final claim construction contentions does not relieve Arthrocare of its responsibility to timely respond to relevant discovery directed to Arthrocare's claim construction contentions. As clearly set forth in Smith & Nephew's initial response, Smith & Nephew indicated that it would supplement its response to this interrogatory once ArthroCare provided its contentions as to claim construction as requested in Smith & Nephew's interrogatories. However, ArthroCare has refused to do so. Smith & Nephew further objects to this interrogatory on the grounds that ArthroCare has failed to meaningfully respond to Smith & Nephew's interrogatory seeking ArthroCare's infringement contentions. It is manifestly unfair, as well as nonsensical since ArthroCare bears the burden of proof on the issue, for ArthroCare to demand Smith & Nephew's

non-infringement contentions without first providing meaningful responses to Smith & Nephew's interrogatory seeking ArthroCare's infringement contentions. Accordingly, Smith & Nephew reserves its right to supplement its response to this interrogatory once ArthroCare answers Smith & Nephew's interrogatories, and as discovery proceeds.

**INTERROGATORY NO. 5**

State in detail all facts upon which Defendant bases its allegation that any of the Patents-In-Suit are invalid, including without limitation the Identity of the individuals with knowledge of any such facts and the Identity of all Documents and things Relating To any such facts.

**RESPONSE TO INTERROGATORY NO. 5**

In addition to the General Objections, Smith & Nephew also objects to this interrogatory to the extent it seeks information protected by attorney-client privilege and/or work product immunity. Smith & Nephew further objects to this interrogatory as overly broad and premature contention discovery: discovery in the case has just begun, there are more than 160 claims in the patents-in-suit, and only recently, i.e., on November 2, 2001, did ArthroCare disclose the identity of certain independent claims it is asserting, and even then, ArthroCare's claim designation was indicated to be tentative. ArthroCare still has not disclosed the identity of the dependent claims it is asserting despite having been asked to do so several times by Smith & Nephew. Accordingly, Smith & Nephew objects to ArthroCare's attempts to take contention discovery in such a piecemeal fashion.

Further answering, Smith & Nephew notes that in its interrogatories served on October 10, 2001, and in particular in Interrogatory Nos. 1-3, Smith & Nephew asked ArthroCare to identify the asserted claims and to provide its contentions as to claim construction. In addition, in Interrogatory Nos. 4, 5, 7, and 12, and in its First Request For Production And Things, Smith & Nephew asked ArthroCare to provide certain information regarding the subject matter of this interrogatory. ArthroCare has requested an extension until December 10, 2001 to respond to these interrogatories and requests for production. Accordingly, Smith & Nephew reserves its

right to supplement its response to this interrogatory once ArthroCare provides its responses to Smith & Nephew's interrogatories and requests for production, and as discovery proceeds.

Subject to its objections and without waiving any objection, Smith & Nephew responds as follows:

As of the present time, Smith & Nephew contends that the asserted claims are invalid for at least the same reasons as, and to the same extent as, set forth in Judge Orrick's Memorandum Decision and Order of December 1, 1998 in the case of *Arthrocare Corp. v. Ethicon, Inc.*, Civil Action No. C-98-0609-WHO (N.D. Cal.)

**SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 5**

In addition to the information provided in response to this interrogatory and subject to and without waiving the general and specific objections therein, and based on the information currently available to it, Smith & Nephew supplements its response as follows: Smith & Nephew further objects to this interrogatory as being premature in light of the current status of this case, as discovery has just begun, ArthroCare has produced almost no confidential documents to Smith & Nephew, expert discovery in this case has not begun, and initial expert reports are not due until September 13, 2002. Smith & Nephew further objects to this interrogatory on the grounds that ArthroCare has refused to identify how the asserted claims of the patents-in-suit should be construed. Smith & Nephew's discovery and investigation are ongoing. Smith & Nephew reserves the right to supplement and/or modify this response as additional material or information become available.

Subject to these objections, Smith & Nephew states that it may rely on one or more of the following references (or others to be identified later) to support Smith & Nephew's prior art invalidity defenses under 35 U.S.C. §§ 102 and 103 for each of the asserted claims set forth in Jared Bobrow's letter of November 2, 2001. Smith & Nephew is continuing to evaluate the

relevant prior art and, if necessary, will provide additional detail on its contentions at an appropriate later date.

U.S. Patent No. 5,697,536: Claim 45

ISSUE/ PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
08/16/33	US 2,056,377	F.C. Wappler	Electronic Instrument
05/00/69	Bio-Medical Engineering 206-216	A.K. Dobbie	The Electrical Aspects of Surgical Diathermy
06/11/74	US 3,815,604	Conor C. O'Malley, Ralph M. Heintz, Sr.	Apparatus For Intraocular Surgery
08/26/75	US 3,901,242	Karl Storz	Electric Surgical Instrument
00/00/76	Acta Medico-technica (Medizinal-Markt), Vol. 24, No. 4, 1976 129 - 134	E. Elsasser and E. Roos	Über ein Instrument zur leckstromfreien transurethralen Resektion (Concerning An Instrument for Transurethral resection without leakage of current)
02/24/76	US 3,939,839	Lawrence E. Curtiss	Resectoscope and Electrode Therefor
01/07/77	2 313 949/ N 76 17587	Siegfried Hiltbrandt et Ludwig Bonnet	Boucle de sectionnement a une ou deux branches pour resectoscope
00/00/78	Gastroenterology, Vol. 74, No. 3, 527- 534, 1978	J.R.A. Piercey, M.D., D.C. Auth, Ph.D, P.E., F.E. Silverstein, M.D., H.R. Willard, Ph.D, M.B. Dennis, D.V.M., D.M. Ellefson, B.S., D.M. Davis, M.S.E.E., R.L. Protell, M.D. and C.E. Rubin, M.D.	Electrosurgical Treatment of Experimental Bleeding Canine Gastric Ulcers: Development and testing of a computer control and a better electrode
09/26/78	US 4,116,198	Eberhard Roos	Electro-Surgical Device
11/00/79	Digestive Diseases and Sciences, Vol. 24, No. 11, 845-848	M.B. Dennis, J. Peoples, R. Hulett, D.C. Auth, R.L. Protell, C.E. Rubin, and F.E. Silverstein	Evolution of Electrofulguration in Control of Bleeding of Experimental Gastric Ulcers
01/01/80	US 4,181,131	Hisao Ogiu	High Frequency Electrosurgical Instrument



ISSUE/ PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
			for Cutting Human Body Cavity Structures
01/22/80	US 4,184,492	Hans H. Meinke, Gerhard Flachenecker, Karl Fastenmeier, Friedrich Landstorfer, Heinz Lidenmeier	Safety Circuitry for High Frequency Cutting and Coagulating Devices
11/11/80	US 4,232,676	Andrew Herczog	Surgical Cutting Instrument
02/03/81	US 4,248,231	Andrew Herczog and James A. Murphy	Surgical Cutting Instrument
02/00/82	CRC Press, American Heart Journal, Vol. 117, 332-341	Kevin J. Barry, MS, Jonathan Kaplan, MD, Raymond J. Connolly, Ph.D, Paul Nardella, BS, Benjamin I. Lee, MD, Gary J. Becker, MD, Bruce F. Waller, MD, and Allan D. Callow, MD, Ph.D	The effect of radiofrequency-generated thermal energy on the mechanical and histologic characteristics of the arterial wall in vivo: Implications for radiofrequency angioplasty
04/27/82	US 4,326,529	James D. Doss and Richard L. Hutson	Corneal-Shaping Electrode
04/26/83	US 4,381,007	James D. Doss	Multipolar Corneal- Shaping Electrode with Flexible Removable Skirt
00/00/85	Urological Research 13:99-102	J.W.A. Ramsay, N.A. Shepherd, M. Butler, P.T. Gosling, R.A. Miller, D.M.A. Wallace, H.N. Whitfield	A Comparison of Bipolar and Monopolar Diathermy Probes in Experimental Animals
06/00/85	JACC Vol. 5, No. 6, 1382-6	Cornelis J. Slager, MSc, Catharina E. Essed, MD, Johan C.H. Schuurbiens, BSc, Nicolaas Bom, Ph.D, Patrick W. Serruys, MD, Geert T. Meester, MD, FACC	Vaporization of Atherosclerotic Plaques by Spark Erosion
05/27/86	US 4,590,934	Jerry L. Malis, Leonard I. Malis, Robert R. Acorcey, David Solt	Bipolar Cutter/Coagulator
06/23/87	US 4,674,499	David S.C. Pao	Coaxial Bipolar Probe
00/00/89	The Organizing	Robert Tucker and	A Bipolar Electrosurgical

ISSUE/ PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
	Committee of the 7 <sup>th</sup> World Congress on Endourology and ESWL Foundation for Advancement of International Science	Stefan Loening	Turp Loop
02/21/89	US 4,805,616	David S.C. Pao	Bipolar Probes for Ophthalmic Surgery and Methods of Performing Anterior Capsulotomy
03/00/89	Journal of Urology Vol. 141, 662-665	Robert D. Tucker, Eugene V. Kramolowsky, Eric Bedell and Charles E. Platz	A Comparison of Urologic Application of Bipolar Versus Monopolar Five French Electrosurgical Probes
04/00/89	JACC Vol. 13 No. 5, 1167-75	Benjamin I. Lee, MD, FACC, Gary J. Becker, MD, Bruce F. Waller, MD, FACC, Kevin J. Barry, MS, Raymond J. Connolly, Ph.D, Jonathan Kaplan, MD, Alan R. Shapiro, MS, Paul C. Nardella, BS	Thermal Compression and Molding of Atherosclerotic Vascular Tissue With Use of Radiofrequency Energy: Implications for Radiofrequency Balloon Angioplasty
04/25/89	US 4,823,791	Frank D. D'Amelio, Dawn M. DeLemos, Dominick G. Esposito, Michelle D. Maxfield, Claude E. Petruzzi, Robert H. Quint	Electrosurgical Probe Apparatus
00/00/90	Urological Research 18:291-294	R.D. Tucker, E.V. Kramolowsky, and C.E. Platz	In vivo effect of 5 French bipolar and monopolar electrosurgical probes on the porcine bladder
02/00/90	Journal of Urology Vol. 143, 275-277	Eugene V. Kramolowsky and Robert D. Tucker	Use of 5F Bipolar Electrosurgical Probe in Endoscopic Urological Procedures
04/05/90	WO 90/03152	John Considine, John Colin	Electro-surgical Apparatus for Removing Tumours from Hollow Organs of the Body

ISSUE/ PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
05/01/90	US 4,920,978	David P. Colvin	Method and Apparatus for the Endoscopic Treatment of Deep Tumors Using RF Hyperthermia
06/05/90	US 4,931,047	Alan Broadwin, Charles Vassallo, Joseph N. Logan, Robert W. Hornlein	Method and Apparatus For Providing Enhanced Tissue Fragmentation And/Or Hemostasis
12/11/90	US 4,976,711	David J. Parins, Mark A. Rydell, Peter Stasz	Ablation Catheter With Selectively Deployable Electrodes
12/25/90	US 4,979,948	Lesslie A. Geddes, Marvin H. Hinds, Joe D. Bourland, William D. Voorhees	Method and Apparatus for Thermally Destroying A Layer of An Organ
03/21/91	DE 3930451 A1	Ellen Hoffmann, Gerhard, Steinbeck, Rudi Mattmuller	Vorrichtung fur die Hochfrequenzkoagulation von biologischem Gewebe
04/16/91	US 5,007,908	Mark A. Rydell	Electrosurgical Instrument Having Needle Cutting Electrode And Spot-Coag Electrode
04/23/91	US 5,009,656	Harry G. Reimels	Bipolar Electrosurgical Instrument
07/30/91	US 5,035,696	Mark A. Rydell	Electrosurgical Instrument for Conducting Endoscopic Retrograde Sphincterotomy
09/00/91	Journal of Urology Vol. 146, 669	Eugene V. Kramolowsky and Robert D. Tucker	The Urological Application of Electrosurgery
09/10/91	US 5,047,027	Mark A. Rydell	Tumor Resector
10/07/91	Bipolar Laparoscopic Cholecystectomy Lecture	Dr. Olsen	Bipolar Laparoscopic Cholecystectomy
01/14/92	US 5,080,660	Terrence J. Buelna	Electrosurgical Electrode
02/04/92	US 5,085,659	Mark A. Rydell	Biopsy Device With Bipolar Coagulation Capability
02/18/92	US 5,088,997	Louis Delahuerga, Robert B. Stoddard, Michael S. Klicek	Gas Coagulation Device

ISSUE/ PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
03/24/92	US 5,098,431	Mark A. Rydell	RF Ablation Catheter
05/12/92	US 5,112,330	Shinichi Nishigaki, Shiro Bito	Resectoscope Apparatus
06/16/92	US 5,122,138	Kim H. Manwaring	Tissue Vaporizing Accessory and Method for an Endoscope
12/01/92	US 5,167,659	Naoki Ohtomo; Shizuo Ninomiya	Blood Coagulating Apparatus
12/15/92	US 5,171,311	Mark A. Rydell, David J. Parins, Steven W. Berhow	Percutaneous Laparoscopic Cholecystectomy Instrument
05/04/93	US 5,207,675	Jerome Canady	Surgical Coagulation Device
06/08/93	US 5,217,459	William Kamerling	Method and Instrument for Performing Eye Surgery
04/26/94	US 5,306,238	Richard P. Fleenor	Laparoscopic Electrosurgical Pencil
06/13/95	US 5,423,882	Warren M. Jackman, Wilton W. Webster, Jr.	Catheter Having Electrode With Annular Recess and Method of Using Same
10/03/95	US 5,454,809	Michael Janssen	Electrosurgical Catheter And Method For Resolving Artherosclerotic Plaque By Radio Frequency Sparking

In addition, Smith & Nephew may rely on the findings of fact made by Judge William H. Orrick in his Memorandum Decision and Order dated December 1, 1998, in which he found that "every element of claim 45 of the '536 patent . . . appear[s] in the Roos '198 patent." Smith & Nephew may also rely on the file history of U.S. Patent No. 4,116,198.

U.S. Patent No. 5,697,882: Claim 1

ISSUE/ PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
08/16/33	US 2,056,377	F.C. Wappler	Electronic Instrument
05/00/69	Bio-Medical Engineering 206-216	A.K. Dobbie	The Electrical Aspects of Surgical Diathermy

08/26/75	US 3,901,242	Karl Storz	Electric Surgical Instrument
06/11/74	US 3,815,604	Conor C. O'Malley, Ralph M. Heintz, Sr.	Apparatus For Intraocular Surgery
00/00/76	Acta Medico-technica (Medizinal-Markt), Vol. 24, No. 4, 1976 129 - 134	E. Elsasser and E. Roos	Über ein Instrument zur leckstromfreien transurethralen Resektion (Concerning An Instrument for transurethral resection without leakage of current)
02/24/76	US 3,939,839	Lawrence E. Curtiss	Resectoscope and Electrode Therefor
07/20/76	US 3,970,088	Charles F. Morrison	Electrosurgical Devices Having Sesquipolar Electrode Structures Incorporated Therein
01/07/77	2 313 949/ N 76 17587	Siegfried Hildebrandt et Ludwig Bonnet	Boucle de sectionnement a une ou deux branches pour resectoscope
02/21/78	US 4,074,718	Charles F. Morrison, Jr.	Electrosurgical Instrument
09/26/78	US 4,116,198	Eberhard Roos	Electro-Surgical Device
11/00/79	Digestive Diseases and Sciences, Vol. 24, No. 11, 845-848	M.B. Dennis, J. Peoples, R. Hulett, D.C. Auth, R.L. Protell, C.E. Rubin, and F.E. Silverstein	Evolution of Electrofulguration in Control of Bleeding of Experimental Gastric Ulcers
01/01/80	US 4,181,131	Hisao Ogiu	High Frequency Electrosurgical Instrument for Cutting Human Body Cavity Structures
01/22/80	US 4,184,492	Hans H. Meinke, Gerhard Flachenecker, Karl Fastenmeier, Friedrich Landstorfer, Heinz Lidenmeier	Safety Circuitry for High Frequency Cutting and Coagulating Devices
4/27/82	US 4,326,529	James D. Doss and Richard L. Hutson	Corneal-Shaping Electrode
04/26/83	US 4,381,007	James D. Doss	Multipolar Corneal- Shaping Electrode with Flexible Removable Skirt
00/00/84	Gut, 25, 1424-1431	C.P. Swain, TN Mills, E. Shemesh, Julia M. Dark, M.R. Lewin, J.S. Clifton, T.C. Northfield,	Which Electrode? A comparison of four endoscopic methods of electrocoagulation in

		P.B. Cotton, and P.R. Salmon	experimental bleeding ulcers
00/00/85	Urological Research 13:99-102	J.W.A. Ramsay, N.A. Shepherd, M. Butler, P.T. Gosling, R.A. Miller, D.M.A. Wallace, H.N. Whitfield	A Comparison of Bipolar and Monopolar Diathermy Probes in Experimental Animals
06/00/85	JACC Vol. 5, No. 6, 1382-6	Cornelis J. Slager, MSc, Catharina E. Essed, MD, Johan C.H. Schuurbijs, BSc, Nicolaas Bom, Ph.D, Patrick W. Serruys, MD, Geert T. Meester, MD, FACC	Vaporization of Atherosclerotic Plaques by Spark Erosion
10/22/85	US 4,548,207	Harry G. Reimels	Disposable Coagulator
05/27/86	US 4,590,934	Jerry L. Malis, Leonard I. Malis, Robert R. Acorcey, David Solt	Bipolar Cutter/Coagulator
00/00/87	Kardiologie, Kardiol. 76: Supp. 6, 67-71 (1987)	C.J. Slager, A.C. Phaff, C.E. Essed, J.C.H. Schuurbijs, N. Bom, V.A. Vandenbroucke, and P.W. Serruys	Spark Erosion of Arteriosclerotic Plaques
4/28/87	US 4,660,571	Stanley R. Hess, Terri Kovacs	Percutaneous Lead Having Radially Adjustable Electrode
06/23/87	US 4,674,499	David S.C. Pao	Coaxial Bipolar Probe
00/00/89	The Organizing Committee of the 7 <sup>th</sup> World Congress on Endourology and ESWL Foundation for Advancement of International Science	Robert Tucker and Stefan Loening	A Bipolar Electrosurgical Turp Loop
00/00/89	SPIE Vol. 1068 Catheter-based Sensing and Imaging Technology	Paul C. Nardella	Radio Frequency Energy and Impedance Feedback
02/21/89	US 4,805,616	David S.C. Pao	Bipolar Probes for Ophthalmic Surgery and Methods of Performing Anterior Capsulotomy
03/00/89	Journal of Urology Vol. 141, 662-665	Robert D. Tucker, Eugene V. Kramolowsky, Eric	A Comparison of Urologic Application of Bipolar Versus Monopolar Five

		Bedell and Charles E. Platz	French Electrosurgical Probes
04/00/89	JACC Vol. 13 No. 5, 1167-75	Benjamin I. Lee, MD, FACC, Gary J. Becker, MD, Bruce F. Waller, MD, FACC, Kevin J. Barry, MS, Raymond J. Connolly, Ph.D., Jonathan Kaplan, MD, Alan R. Shapiro, MS, Paul C. Nardella, BS	Thermal Compression and Molding of Atherosclerotic Vascular Tissue With Use of Radiofrequency Energy: Implications for Radiofrequency Balloon Angioplasty
00/00/90	Urological Research 18:291-294	R.D. Tucker, E.V. Kramolowsky, and C.E. Platz	In vivo effect of 5 French bipolar and monopolar electrosurgical probes on the porcine bladder
02/00/90	Journal of Urology Vol. 143, 275-277	Eugene V. Kramolowsky and Robert D. Tucker	Use of 5F Bipolar Electrosurgical Probe in Endoscopic Urological Procedures
04/05/90	WO 90/03152	John Considine, John Colin	Electro-surgical Apparatus for Removing Tumours from Hollow Organs of the Body
06/05/90	US 4,931,047	Alan Broadwin, Charles Vassallo, Joseph N. Logan, Robert W. Hornlein	Method and Apparatus For Providing Enhanced Tissue Fragmentation And/Or Hemostasis
06/26/90	US 4,936,281	Peter Stasz	Ultrasonically Enhanced RF Ablation Catheter
12/11/90	US 4,976,711	David J. Parins, Mark A. Rydell, Peter Stasz	Ablation Catheter With Selectively Deployable Electrodes
12/25/90	US 4,979,948	Lesslie A. Geddes, Marvin H. Hinds, Joe D. Bourland, William D. Voorhees	Method and Apparatus for Thermally Destroying A Layer of An Organ
04/16/91	US 5,007,908	Mark A. Rydell	Electrosurgical Instrument Having Needle Cutting Electrode And Spot-Coag Electrode
04/23/91	US 5,009,656	Harry G. Reimels	Bipolar Electrosurgical Instrument
07/30/91	US 5,035,696	Mark A. Rydell	Electrosurgical Instrument for Conducting Endoscopic Retrograde

			Sphincterotomy
09/00/91	Journal of Urology Vol. 146, 669	Eugène V. Kramolowsky and Robert D. Tucker	The Urological Application of Electrosurgery
09/10/91	US 5,047,026	Mark A. Rydell	Electrosurgical Implement For Tunneling Through Tissue
09/10/91	US 5,047,027	Mark A. Rydell	Tumor Resector
10/07/91	Bipolar Laparoscopic Cholecystectomy Lecture	Dr. Olsen	Bipolar Laparoscopic Cholecystectomy
01/14/92	US 5,080,660	Terrence J. Buelna	Electrosurgical Electrode
02/18/92	US 5,088,997	Louis Delahuerge, Robert B. Stoddard, Michael S. Klicek	Gas Coagulation Device
03/24/92	US 5,098,431	Mark A. Rydell	RF Ablation Catheter
04/28/92	US 5,108,391	Gerhard Flachenecker, Karl Fastenmeier, Heinz Lindenmeier	High-Frequency Generator For Tissue Cutting And For Coagulating In High- Frequency Surgery
05/12/92	US 5,112,330	Shinichi Nishigaki, Shiro Bito	Resectoscope Apparatus
06/16/92	US 5,122,138	Kim H. Manwaring	Tissue Vaporizing Accessory and Method for an Endoscope
12/01/92	US 5,167,659	Naoki Ohtomo; Shizuo Ninomiya	Blood Coagulating Apparatus
12/15/92	US 5,171,311	Mark A. Rydell, David J. Parins, Steven W. Berhow	Percutaneous Laparoscopic Cholectectomy Instrument
03/30/93	US 5,197,963	David J. Parins	Electrosurgical Instrument with Extendable Sheath for Irrigation and Aspiration
04/26/94	US 5,306,238	Richard P. Fleenor	Laparoscopic Electrosurgical Pencil
06/13/95	US 5,423,882	Warren M. Jackman, Wilton W. Webster, Jr.	Catheter Having Electrode with Annular Recess and Method of Using Same
10/03/95	US 5,454,809	Michael Janssen	Electrosurgical Catheter And Method For Resolving Artherosclerotic Plaque By Radio Frequency Sparking



Smith & Nephew may also rely on the file history of U.S. Patent No. 4,116,198.

U.S. Patent No. 5,697,882: Claim 26

ISSUE/ PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
05/00/69	Bio-Medical Engineering 206-216	A.K. Dobbie	The Electrical Aspects of Surgical Diathermy
08/16/33	US 2,056,371	F.C. Wappler	Electronic Instrument
06/11/74	US 3,815,604	Conor C. O'Malley, Ralph M. Heintz, Sr.	Apparatus For Intraocular Surgery
08/13/74	US 3,828,780	Charles F. Morrison, Jr.	Combined Electrocoagulator-Suction Instrument
01/00/75	IEEE Transactions On Biomedical Engineering	William M. Homig	The Mechanism of Cutting in Electrosurgery
08/26/75	US 3,901,242	Karl Storz	Electric Surgical Instrument
11/18/75	US 3,920,021	Siegfried Hildebrandt	Coagulating Devices
02/24/76	US 3,939,839	Lawrence E. Curtiss	Resectoscope and Electrode Therefor
07/20/76	US 3,970,088	Charles F. Morrison	Electrosurgical Devices Having Sesquipolar Electrode Structures Incorporated Therein
00/00/76	Acta Medico Technica (Medizinal-Markt), Vol. 24, No. 4, 1976 129 - 134	E. Elsasser and E. Roos	Über ein Instrument zur leckstromfreien transurethralen Resektion (Concerning An Instrument for transurethral resection without leakage of current)
01/07/77	2 313 949/ N 76 17587	Siegfried Hildebrandt et Ludwig Bonnet	Boucle de sectionnement à une ou deux branches pour resectoscope
02/21/78	US 4,074,718	Charles F. Morrison, Jr.	Electrosurgical Instrument
06/06/78	US 4,092,986	Max Schneiderman	Constant Output Electrosurgical Unit
09/26/78	US 4,116,198	Eberhard Roos	Electro-Surgical Device
11/00/79	Digestive Diseases and Sciences, Vol. 24, No. 11, 845-848	M.B. Dennis, J. Peoples, R. Hulet, D.C. Auth, R.L. Protell, C.E. Rubin, and F.E. Silverstein	Evolution of Electrofulguration in Control of Bleeding of Experimental Gastric Ulcers
01/01/80	US 4,181,131	Hisao Ogiu	High Frequency

			Electrosurgical Instrument for Cutting Human Body Cavity Structures
01/22/80	US 4,184,492	Hans H. Meinke, Gerhard Flachenecker, Karl Fastenmeier, Friedrich Landstorfer, Heinz Lidenmeier	Safety Circuitry for High Frequency Cutting and Coagulating Devices
04/27/82	US 4,326,529	James D. Doss and Richard L. Hutson	Cornical-Shaping Electrode
04/26/83	US 4,381,007	James D. Doss	Multipolar Cornical-Shaping Electrode with Flexible Removable Skirt
00/00/84	Gut, 25, 1424-1431	C.P. Swain, TN Mills, E. Shemesh, Julia M. Dark, M.R. Lewin, J.S. Clifton, T.C. Northfield, P.B. Cotton, and P.R. Salmon	Which Electrode? A comparison of four endoscopic methods of electrocoagulation in experimental bleeding ulcers
00/00/85	Urological Research 13:99-102	J.W.A. Ramsay, N.A. Shepherd, M. Butler, P.T. Gosling, R.A. Miller, D.M.A. Wallace, H.N. Whitfield	A Comparison of Bipolar and Monopolar Diathermy Probes in Experimental Animals
06/00/85	JACC Vol. 5, No. 6, 1382-6	Cornelis J. Slager, MSc, Catharina E. Essed, MD, Johan C.H. Schuurbiers, BSc, Nicolaas Bom, Ph.D, Patrick W. Serruys, MD, Geert T. Meester, MD, FACC	Vaporization of Atherosclerotic Plaques by Spark Erosion
10/22/85	US 4,548,207	Harry G. Reimels	Disposable Coagulator
05/27/86	US 4,590,934	Jerry L. Malis, Leonard I. Malis, Robert R. Acorcey, David Solt	Bipolar Cutter/Coagulator
00/00/87	Kardiologie, Kardiol. 76: Supp. 6, 67-71 (1987)	C.J. Slager, A.C. Phaff, C.E. Essed, J.C.H. Schuurbiers, N. Bom, V.A. Vandenbroucke, and P.W. Serruys	Spark Erosion of Arteriosclerotic Plaques
4/28/87	US 4,660,571	Stanley R. Hess, Terri Kovacs	Percutaneous Lead Having Radially Adjustable Electrode
06/23/87	US 4,674,499	David S.C. Pao	Coaxial Bipolar Probe
07/00/88	Valleylab Part	Valleylab, Inc.	Surgistat Service Manual

	Number 945 100 102 A		
00/00/89	SPIE Vol. 1068 Catheter-based Sensing and Imaging Technology	Paul C. Nardella	Radio Frequency Energy and Impedance Feedback
00/00/89	The Organizing Committee of the 7 <sup>th</sup> World Congress on Endourology and ESWL Foundation for Advancement of International Science	Robert Tucker and Stefan Loening	A Bipolar Electrosurgical Turp Loop
03/00/89	Journal of Urology Vol. 141, 662-665	Robert D. Tucker, Eugene V. Kramolowsky, Eric Bedell and Charles E. Platz	A Comparison of Urologic Application of Bipolar Versus Monopolar Five French Electrosurgical Probes
02/21/89	US 4,805,616	David S.C. Pao	Bipolar Probes for Ophthalmic Surgery and Methods of Performing Anterior Capsulotomy
04/00/89	JACC Vol 13 No. 5, 1167-75	Benjamin I. Lee, MD, FACC, Gary J. Becker, MD, Bruce F. Waller, MD, FACC, Kevin J. Barry, MS, Raymond J. Connolly, Ph.D, Jonathan Kaplan, MD, Alan R. Shapiro, MS, Paul C. Nardella, BS	Thermal Compression and Molding of Atherosclerotic Vascular Tissue With Use of Radiofrequency Energy: Implications for Radiofrequency Balloon Angioplasty
00/00/90	Urological Research 18:291-294	R.D. Tucker, E.V. Kramolowsky, and C.E. Platz	In vivo effect of 5 French bipolar and monopolar electrosurgical probes on the porcine bladder
02/00/90	Journal of Urology Vol. 143, 275-277	Eugene V. Kramolowsky and Robert D. Tucker	Use of 5F Bipolar Electrosurgical Probe in Endoscopic Urological Procedures
04/05/90	WO 90/03152	John Considine, John Colin	Electro-surgical Apparatus for Removing Tumours from Hollow Organs of the Body
06/05/90	US 4,931,047	Alan Broadwin, Charles Vassallo, Joseph N. Logan, Robert W.	Method and Apparatus For Providing Enhanced Tissue Fragmentation And/Or

		Hornlein	Hemostasis
06/26/90	US 4,936,281	Peter Stasz	Ultrasonically Enhanced RF Ablation Catheter
12/11/90	US 4,976,711	David J. Parins, Mark A. Rydell, Peter Stasz	Ablation Catheter With Selectively Deployable Electrodes
12/25/90	US 4,979,948	Lesslie A. Geddes, Marvin H. Hinds, Joe D. Bourland, William D. Voorhees	Method and Apparatus For Thermally Destroying A Layer Of An Organ
04/16/91	US 5,007,908	Mark A. Rydell	Electrosurgical Instrument Having Needle Cutting Electrode And Spot-Coag Electrode
04/23/91	US 5,009,656	Harry G. Reimels	Bipolar Electrosurgical Instrument
07/30/91	US 5,035,696	Mark A. Rydell	Electrosurgical Instrument For Conducting Endoscopic Retrograde Sphincterotomy
09/10/91	US 5,047,026	Mark A. Rydell	Electrosurgical Implement For Tunneling Through Tissue
09/10/91	US 5,047,027	Mark A. Rydell	Tumor Resector
09/00/91	Journal of Urology Vol. 146, 669	Eugene V. Kramolowsky and Robert D. Tucker	The Urological Application of Electrosurgery
10/07/91	Bipolar Laparoscopic Cholecystectomy Lecture	Dr. Olsen	Bipolar Laparoscopic Cholecystectomy
01/14/92	US 5,080,660	Terrence J. Buelna	Electrosurgical Electrode
02/18/92	US 5,088,997	Louis Delahueriga, Robert B. Stoddard, Michael S. Klicek	Gas Coagulation Device
03/24/92	US 5,098,431	Mark A. Rydell	RF Ablation Catheter
04/28/92	US 5,108,391	Gerhard Flachenecker, Karl Fastenmeier, Heinz Lindenmeier	High-Frequency Generator For Tissue Cutting And For Coagulating In High-Frequency Surgery
05/12/92	US 5,112,330	Shinichi Nishigaki, Shiro Bito	Resectoscope Apparatus
06/16/92	US 5,122,138	Kim H. Manwaring	Tissue Vaporizing Accessory and Method for an Endoscope
12/01/92	US 5,167,659	Naoki Ohtomo; Shizuo Ninomiya	Blood Coagulating Apparatus

12/15/92	US 5,171,311	Mark A. Rydell, David J. Parins, Steven W. Berhow	Percutaneous Laparoscopic Choleectomy Instrument
03/30/93	US 5,197,963	David J. Parins	Electrosurgical Instrument with Extendable Sheath for Irrigation and Aspiration
04/26/94	US 5,306,238	Richard P. Fleenor	Laparoscopic Electrosurgical Pencil
06/13/95	US 5,423,882	Warren M. Jackman, Wilton W. Webster, Jr.	Catheter Having Electrode With Annular Recess and Method of Using Same
10/03/95	US 5,454,809	Michael Janssen	Electrosurgical Catheter And Method For Resolving Artherosclerotic Plaque By Radio Frequency Sparking

In addition, Smith & Nephew may rely on the findings of fact made by Judge William H. Orrick in his Memorandum Decision and Order dated December 1, 1998, in which he found that there was "a substantial question to whether claim 26 of the '882 patent is invalid for obviousness in light of the Roos '198 patent and the Elsasser and Roos article." Smith & Nephew may also rely on the file history of U.S. Patent No. 4,116,198.

**U.S. Patent No. 5,697,882: Claim 28**

<b>ISSUE/ PUBLICATION DATE</b>	<b>PATENT NUMBER/ PUBLICATION</b>	<b>INVENTOR/AUTHOR</b>	<b>TITLE</b>
08/16/33	US 2,056,377	F.C. Wappler	Electronic Instrument
08/26/75	US 3,901,242	Karl Storz	Electric Surgical Instrument
11/18/75	US 3,920,021	Siegfried Hiltbrandt	Coagulating Devices
00/00/76	Acta Medico Technica (Medizinal-Markt), Vol. 24, No. 4, 1976 129 - 134	E. Elsasser and E. Roos	Über ein Instrument zur leckstromfreien transurethralen Resektion (Concerning An Instrument for Transurethral resection without leakage of current)
02/24/76	US 3,939,839	Lawrence E. Curtiss	Resectoscope and Electrode Therefor

07/20/76	US 3,970,088	Charles F. Morrison	Electrosurgical Devices Having Sesquipolar Electrode Structures Incorporated Therein
01/07/77	2 313 949/ N 76 17587	Siegfried Hildebrandt et Ludwig Bonnet	Boucle de sectionnement a une ou deux branches pour resertoscope
02/21/78	US 4,074,718	Charles F. Morrison, Jr.	Electrosurgical Instrument
09/26/78	US 4,116,198	Eberhard Roos	Electro-Surgical Device
01/01/80	US 4,181,131	Hisao Ogiu	High Frequency Electrosurgical Instrument for Cutting Human Body Cavity Structures
01/22/80	US 4,184,492	Hans H. Meinke, Gerhard Flachenecker, Karl Fastenmeier, Friedrich Landstorfer, Heinz Lidenmeier	Safety Circuitry for High Frequency Cutting and Coagulating Devices
02/00/82	CRC Press, American Heart Journal, Vol. 117, 332-341	Kevin J. Barry, MS, Jonathan Kaplan, MD, Raymond J. Comolly, Ph.D, Paul Nardella, BS, Benjamin I. Lee, MD, Gary J. Becker, MD, Bruce F. Waller, MD, and Allan D. Callow, MD, Ph.D	The effect of radiofrequency- generated thermal energy on the mechanical and histologic characteristics of the arterial wall in vivo: Implications for radiofrequency angioplasty
4/27/82	US 4,326,529	James D. Doss and Richard L. Hutson	Corneal-Shaping Electrode
04/26/83	US 4,381,007	James D. Doss	Multipolar Corneal-Shaping Electrode with Flexible Removable Skirt
00/00/84	Gut, 25, 1424-1431	C.P. Swain, TN Mills, E. Shemesh, Julia M. Dark, M.R. Lewin, J.S. Clifton, T.C. Northfield, P.B. Cotton, and P.R. Salmon	Which Electrode? A comparison of four endoscopic methods of electrocoagulation in experimental bleeding ulcers
10/22/85	US 4,548,207	Harry G. Reimels	Disposable Coagulator
00/00/85	Urological Research 13:99-102	J.W.A. Ramsay, N.A. Shepherd, M. Butler, P.T. Gosling, R.A. Miller, D.M.A. Wallace, H.N. Whitfield	A Comparison of Bipolar and Monopolar Diathermy Probes in Experimental Animals
06/00/85	JACC Vol. 5, No. 6,	Cornelis J. Slager, MSc,	Vaporization of

	1382-6	Catharina E. Essed, MD, Johan C.H. Schuurbiers, BSc, Nicolaas Bom, Ph.D, Patrick W. Serruys, MD, Geert T. Meester, MD, FACC	Atherosclerotic Plaques by Spark Erosion
05/27/86	US 4,590,934	Jerry L. Malis, Leonard I. Malis, Robert R. Acorcey, David Solt	Bipolar Cutter/Coagulator
00/00/87	Kardiologie, Kardiol.76: Supp. 6, 67-71 (1987)	C.J. Slager, A.C. Phaff, C.E. Essed, J.C.H. Schuurbiers, N. Bom, V.A. Vandenbroucke, and P.W. Serruys	Spark Erosion of Arteriosclerotic Plaques
04/28/87	US 4,660,571	Stanley R. Hess, Terri Kovacs	Percutaneous Lead Having Radially Adjustable Electrode
06/23/87	US 4,674,499	David S.C. Pao	Coaxial Bipolar Probe
03/00/89	Journal of Urology Vol. 141, 662-665	Robert D. Tucker, Eugene V. Kramolowsky, Eric Bedell and Charles E. Platz	A Comparison of Urologic Application of Bipolar Versus Monopolar Five French Electrosurgical Probes
00/00/89	SPIE Vol. 1068 Catheter-based ensing and Imaging Technology	Paul C. Nardella	Radio Frequency Energy and Impedance Feedback
00/00/89	The Organizing Committee of the 7 <sup>th</sup> World Congress on Endourology and ESWL Foundation for Advancement of International Science	Robert Tucker and Stefan Loening	A Bipolar Electrosurgical Turp Loop
02/21/89	US 4,805,616	David S.C. Pao	Bipolar Probes for Ophthalmic Surgery and Methods of Performing Anterior Capsulotomy
04/00/89	JACC Vol. 13 No. 5, 1167-75	Benjamin I. Lee, MD, FACC, Gary J. Becker, MD, Bruce F. Waller, MD, FACC, Kevin J. Barry, MS, Raymond J. Connolly, Ph.D, Jonathan Kaplan, MD, Alan R. Shapiro, MS,	Thermal Compression and Molding of Atherosclerotic Vascular Tissue With Use of Radiofrequency Energy: Implications for Radiofrequency Balloon Angioplasty

		Paul C. Nardella, BS	
05/23/89	US 4,832,048	Donald Cohen	Suction Ablation Catheter
00/00/90	Urological Research 18:291-294	R.D. Tucker, E.V. Kramolowsky, and C.E. Platz	In vivo effect of 5 French bipolar and monopolar electrosurgical probes on the porcine bladder
02/00/90	Journal of Urology Vol. 143, 275-277	Eugene V. Kramolowsky and Robert D. Tucker	Use of 5F Bipolar Electrosurgical Probe in Endoscopic Urological Procedures
04/05/90	WO 90/03152	John Considine, John Colin	Electro-surgical Apparatus for Removing Tumours from Hollow Organs of the Body
05/01/90	US 4,920,978	David P. Colvin	Method and Apparatus for the Endoscopic Treatment of Deep Tumors Using RF Hyperthermia
06/26/90	US 4,936,281	Peter Stasz	Ultrasonically Enhanced RF Ablation Catheter
10/30/90	US 4,966,597	Eric R. Cosman	Thermometric Cardiac Tissue Ablation Electrode with Ultra- Sensitive Temperature Detection
12/11/90	US 4,976,711	David J. Parins, Mark A. Rydell, Peter Stasz	Ablation Catheter With Selectively Deployable Electrodes
12/25/90	US 4,979,948	Lesslie A. Geddes, Marvin H. Hinds, Joe D. Bourland, William D. Voorhees	Method and Apparatus for Thermally Destroying A Layer of An Organ
09/00/91	Journal of Urology Vol. 146, 669	Eugene V. Kramolowsky and Robert D. Tucker	The Urological Application of Electrosurgery
04/16/91	US 5,007,908	Mark A. Rydell	Electrosurgical Instrument Having Needle Cutting Electrode And Spot-Coag. Electrode
04/23/91	US 5,009,656	Harry G. Reimels	Bipolar Electrosurgical Instrument
07/30/91	US 5,035,696	Mark A. Rydell	Electrosurgical Instrument for Conducting Endoscopic Retrograde Sphincterotomy
09/10/91	US 5,047,026	Mark A. Rydell	Electrosurgical Implement For Tunneling Through Tissue
09/10/91	US 5,047,027	Mark A. Rydell	Tumor Resector



10/07/91	Bipolar Laparoscopic Cholecystectomy Lecture	Dr. Olsen	Bipolar Laparoscopic Cholecystectomy
01/14/92	US 5,080,660	Terrence J. Buelna	Electrosurgical Electrode
01/28/92	US 5,084,044	Robert H. Quint	Apparatus for Endometrial Ablation and Method of Using Same
03/24/92	US 5,098,431	Mark A. Rydell	RF Ablation Catheter
05/12/92	US 5,112,330	Shinichi Nishigaki, Shiro Bito	Resectoscope Apparatus
04/28/92	US 5,108,391	Gerhard Flachenecker, Karl Fastenmeier, Heinz Lindenmeier	High-Frequency Generator For Tissue Cutting And For Coagulating In High-Frequency Surgery
06/16/92	US 5,122,138	Kim H. Manwaring	Tissue Vaporizing Accessory and Method for an Endoscope
12/01/92	US 5,167,659	Naoki Ohtomo; Shizuo Ninomiya	Blood Coagulating Apparatus
12/15/92	US 5,171,311	Mark A. Rydell, David J. Parins, Steven W. Berbow	Percutaneous Laparoscopic Choleectomy Instrument
03/30/93	US 5,197,963	David J. Parins	Electrosurgical Instrument with Extendable Sheath for Irrigation and Aspiration
04/26/94	US 5,306,238	Richard P. Fleenor	Laparoscopic Electrosurgical Pencil
06/13/95	US 5,423,882	Warren M. Jackman, Wilton W. Webster, Jr.	Catheter Having Electrode With Annular Recess and Method of Using Same
10/03/95	US 5,454,809	Michael Janssen	Electrosurgical Catheter And Method For Resolving Artherosclerotic Plaque By Radio Frequency Sparking

In addition, Smith & Nephew may rely on the findings of fact made by Judge William H. Orrick in his Memorandum Decision and Order dated December 1, 1998, in which he found that there was "a substantial question as to whether claim 28 of the '882 patent is invalid for obviousness in light of the Roos '198 patent and the Elsasser and Roos article." Smith & Nephew may also rely on the file history of U.S. Patent No. 4,116,198.

U.S. Patent No. 5,224,592 B1: Claim 1

ISSUE/ PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
00/00/76	Acta Medico-technica (Medizinal-Markt), Vol. 24, No. 4, 1976 129 - 134	E. Elsasser and E. Roos	Über ein Instrument zur leckstromfreien transurethralen Resektion (Concerning An Instrument for Transurethral resection without leakage of current)
02/24/76	US 3,939,839	Lawrence E. Curtiss	Resectoscope and Electrode Therefor
07/20/76	US 3,970,088	Charles F. Morrison	Electrosurgical Devices Having Sesquipolar Electrode Structures Incorporated Therein
01/07/77	2 313 949/ N 76 17587	Siegfried Hiltbrandt et Ludwig Bonnet	Boucle de sectionnement à une ou deux branches pour resectoscope
02/21/78	US 4,074,718	Charles F. Morrison, Jr.	Electrosurgical Instrument
09/26/78	US 4,116,198	Eberhard Roos	Electro-Surgical Device
04/26/83	US 4,381,007	James D. Doss	Multipolar Corneal- Shaping Electrode with Flexible Removable Skirt
06/00/85	JACC Vol. 5, No. 6, 1382-6	Cornelis J. Slager, MSc, Catharina E. Essed, MD, Johan C.H. Schuurbiers, BSc, Nicolaas Bom, Ph.D. Patrick W. Serruys, MD, Geert T. Meester, MD, FACC	Vaporization of Atherosclerotic Plaques by Spark Erosion
04/28/87	US 4,660,571	Stanley R. Hess, Terri Kovacs	Percutaneous Lead Having Radially Adjustable Electrode
06/23/87	US 4,674,499	David S.C. Pao	Coaxial Bipolar Probe
11/22/88	US 4,785,823	Philip E. Eggers, Robert F. Shaw	Methods And Apparatus For Performing In Vivo Blood Thermodilution Procedures
00/00/89	SPIE Vol. 1068 Catheter-based	Paul C. Nardella	Radio Frequency Energy and Impedance Feedback

	Sensing and Imaging Technology		
00/00/89	The Organizing Committee of the 7 <sup>th</sup> World Congress on Endourology and ESWL Foundation for Advancement of International Science	Robert Tucker and Stefan Loening	A Bipolar Electrosurgical Turp Loop
04/23/91	US 5,009,656	Harry G. Reimels	Bipolar Electrosurgical Instrument
09/10/91	US 5,047,026	Mark A. Rydell	Electrosurgical Implement For Tunneling Through Tissue
10/07/91	Bipolar Laparoscopic Cholecystectomy Lecture	Dr. Olsen	Bipolar Laparoscopic Cholecystectomy
01/14/92	US 5,080,660	Terrence J. Buelna	Electrosurgical Electrode
02/18/92	US 5,088,997	Louis Delahuerge, Robert B. Stoddard, Michael S. Klicek	Gas Coagulation Device
03/24/92	US 5,098,431	Mark A. Rydell	RF Ablation Catheter
05/12/92	US 5,112,330	Shinichi Nishigaki, Shiro Bito	Resectoscope Apparatus
04/28/92	US 5,108,391	Gerhard Flachenecker, Karl Fastenmeier, Heinz Lindenmeier	High-Frequency Generator For Tissue Cutting And For Coagulating In High-Frequency Surgery
12/01/92	US 5,167,659	Naoki Ohtomo; Shizuo Ninomiya	Blood Coagulating Apparatus
05/04/93	US 5,207,675	Jerome Canady	Surgical Coagulation Device
04/26/94	US 5,306,238	Richard P. Fleenor	Laparoscopic Electrosurgical Pencil
06/13/95	US 5,423,882	Warren M. Jackman, Wilton W. Webster, Jr.	Catheter Having Electrode With Annular Recess and Method of Using Same
10/03/95	US 5,454,809	Michael Janssen	Electrosurgical Catheter And Method For Resolving Artherosclerotic Plaque By Radio Frequency Sparking

Smith & Nephew may also rely on the file history of U.S. Patent No. 4,116,198.

**U.S. Patent No. 5,224,592 B1: Claim 23**

<b>ISSUE/ PUBLICATION DATE</b>	<b>PATENT NUMBER/ PUBLICATION</b>	<b>INVENTOR/AUTHOR</b>	<b>TITLE</b>
00/00/76	Acta Medicothcnica (Medizinal-Markt), Vol. 24, No. 4, 1976 129 - 134	E. Elsasser and E. Roos	Über ein Instrument zur leckstromfreien transurethralen Resektion (Concerning An Instrument for Transurethral resection without leakage of current).
02/24/76	US 3,939,839	Lawrence E. Curtiss	Resectoscope and Electrode Therefor
07/20/76	US 3,970,088	Charles F. Morrison	Electrosurgical Devices Having Scsquipolar Electrode Structures Incorporated Therein
01/07/77	2 313 949/ N 76 17587	Siegfried Hiltbrandt et Ludwig Bonnet	Boucle de sectionnement a une ou deux branches pour resertoscope
02/21/78	US 4,074,718	Charles F. Morrison, Jr.	Electrosurgical Instrument
09/26/78	US 4,116,198	Eberhard Roos	Electro-Surgical Device
06/00/83	JACC Vol. 5, No. 6, 1382-6	Cornelis J. Slager, MSc, Catharina E. Essed, MD, Johan C.H. Schuurbiers, BSc, Nicolaas Bom, Ph.D, Patrick W. Serruys, MD, Geert T. Meester, MD, FACC	Vaporization of Atherosclerotic Plaques by Spark Erosion
04/28/87	US 4,660,571	Stanley R. Hess, Terri Kovacs	Percutaneous Lead Having Radially Adjustable Electrode
00/00/89	SPIE Vol. 1068 Catheter-based Sensing and Imaging Technology	Paul C. Nardella	Radio Frequency Energy and Impedance Feedback
00/00/89	The Organizing Committee of the 7 <sup>th</sup> World Congress on Endourology and ESWL Foundation for Advancement of International Science	Robert Tucker and Stefan Loening	A Bipolar Electrosurgical Turp Loop

09/10/91	US 5,047,026	Mark A. Rydell	Electrosurgical Implement For Tunneling Through Tissue
10/07/91	Bipolar Laparoscopic Cholecystectomy Lecture	Dr. Olsen	Bipolar Laparoscopic Cholecystectomy
01/14/92	US 5,080,660	Terrence J. Buelna	Electrosurgical Electrode
02/18/92	US 5,088,997	Louis Delahuerge, Robert B. Stoddard, Michael S. Klicek	Gas Coagulation Device
03/24/92	US 5,098,431	Mark A. Rydell	RF Ablation Catheter
05/12/92	US 5,112,330	Shinichi Nishigaki, Shiro Bito	Resectoscope Apparatus
04/28/92	US 5,108,391	Gerhard Flachenecker, Karl Fastenmeier, Heinz Lindenmeier	High-Frequency Generator For Tissue Cutting And For Coagulating In High-Frequency Surgery
12/01/92	US 5,167,659	Naoki Ohtomo; Shizuo Ninomiya	Blood Coagulating Apparatus
05/04/93	US 5,207,675	Jerome Canady	Surgical Coagulation Device
04/26/94	US 5,306,238	Richard P. Fleenor	Laparoscopic Electrosurgical Pencil
06/13/95	US 5,423,882	Warren M. Jackman, Wilton W. Webster, Jr.	Catheter Having Electrode With Annular Recess and Method of Using Same
10/03/95	US 5,454,809	Michael Janssen	Electrosurgical Catheter And Method For Resolving Artherosclerotic Plaque By Radio Frequency Sparking

Smith & Nephew may also rely on the file history of U.S. Patent No. 4,116,198.

Smith & Nephew further contends that claims 1 and 28 of U.S. Patent No. 5,697,882 are invalid under 35 U.S.C. § 112 because the specification of U.S. patent No. 5,697,882 does not describe the manner and process of making and using the alleged invention, in such full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same. Rather, undue experimentation would be necessary to successfully practice the claimed apparatus. In addition, Smith & Nephew

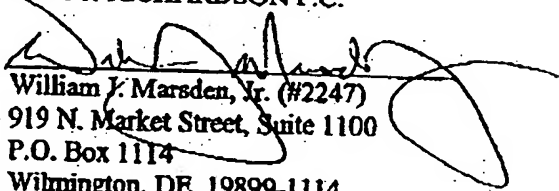
may rely on the findings of fact made by Judge William H. Orrick in his Memorandum Decision and Order dated December 1, 1998, in which he concluded that there was a substantial question that claim 1 of the '882 patent is invalid for lack of enablement.

Smith & Nephew also contends that claim 28 of U.S. Patent No. 5,697,882 and claim 1 of U.S. Patent No. 5,224,592 B1 are indefinite, and therefore invalid under 35 U.S.C. § 112.

Smith & Nephew's investigation into its defenses is continuing, and it may assert additional invalidity defenses as discovery progresses.

Dated: December 9, 2001

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**CERTIFICATE OF SERVICE**

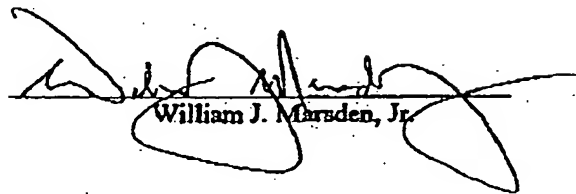
I hereby certify that on this \_\_\_\_ day of December, 2001, a true and correct copy of the within document was caused to be served on the attorneys of record at the following addresses as indicated:

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